be predisposed by non-specific factors such as parasitic infestation, atopy, ultraviolet rays or unknown factors.

PP-028 The bacterial flora on the hands of hospital personnel

S. Zaki[1]*, A. Shaala[1], S. Abd El Salam[1], S. Sadaka[1]. [1]*Microbiology, Faculty of Medicine Alexandria University, Egypt*

Introduction: The micro-organisms on the hands comprise resident and transient flora. Transient bacteria play a major role in the transmission of infection in hospitals. As physician and nurses' come in contact with patients, they carry pathogenic organisms on their hands and spread these nosocomial pathogens.
Aim: To study the bacterial flora on the hands of the hospital personnel before and after working shifts.
Subjects and Methods: Two hundred nurses and physicians. The hands were sampled, using impression plate technique, before work shift, after hand washing with non-medicated bar soap and at the end of the work shift. The plates were incubated for 24 hours aerobically at 37°C.
- Gram-negative bacilli were identified by API 20E.
- *Staphylococcus aureus* was identified by slide-coagulate test and tested for methicillin sensitivity.
- Novobiocin sensitivity test to differentiate *Staph. epidermidis* (sensitive) and *Staph. saprophyticus* (resistant).

Results: 779 isolates were obtained before work shift, 414 after handwashing, and 816 at the end of work shift.
- There was a significant high carriage rate of Gram-negative bacilli by the hospital personnel at the end of work shift (66.5%) compared to that before work shift (29.5%) and after handwashing (9.5%). *Acinetobacter calcoaceticus* var. *anitratus* was the commonest Gram-negative bacillus isolated, the next was *Pseudomonas aeruginosa* followed by *Klebsiella pneumoniae*.
- The hospital personnel had a high carriage rate of *Staph. aureus* at all time of sampling. Most of the strains isolated were methicillin-resistant. There was no significant difference between the carriage rates before and after work shift, though there was a significant difference in the carriage rates after handwashing and at the end of work shift.

Conclusions:
- The hospital personnel mainly acquire Gram-negative bacilli from the hospital environment.
- *Staph. aureus* has established itself as temporary resident flora on the hand of hospital personnel.

PP-029 Efficacy of linezolid against multidrug resistant Gram-positive bacteria

F. Kaleem[1]*, J. Usman[1], A. Hassan[1], A. Khalid[1], M. Omair[1], R. Uddin[1]. [1]*National University of Sciences and Technology, AMC, Pakistan*

Background: The incidence of nosocomial infections caused by Gram-positive bacteria has increased dramatically over past few years. Methicillin resistant *Staphyloccocus aureus*, vancomycin resistant enterococci and coagulase negative staphylococci have been implicated in many nosocomial infections. Linezolid is one of the newer antibacterial agents with a spectrum of activity against Gram-positive bacteria. It is the first drug of a new class of antibiotics, the oxazolidinones, introduced recently to therapy.
Aims and Objectives: To find out in vitro efficacy of linezolid against multidrug resistant Gram positive organisms.
Materials and Methods: This descriptive cross sectional study was carried out in the department of Microbiology, Army Medical College, National University of Sciences and Technology, Pakistan over a period of one year. All samples were dealt with standard microbiological methods. All isolated multidrug resistant Gram positive organisms were subjected to the determination of minimum inhibitory concentrations of linezolid by using E strip. Minimum inhibitory concentrations 50 and minimum inhibitory concentrations 90 were calculated.
Results: Majority of the isolates were methicillin sensitive *Staphylococcus aureus* followed by coagulase negative staphylococci. 15 methicillin resistant *Staphylococcus aureus* and 10 vancomycin resistant enterococci were isolated during the study period. All the Gram-positive organisms were uniformly sensitive to linezolid including vancomycin resistant enterococci and methicillin resistant staphylococci.
Conclusion: Linezolid is highly active against Gram-positive organism including multidrug resistant organisms so it can prove to be a good therapeutic option for infections caused by such bacteria.

PP-030 Retrospective analysis of 118 cases of brucellosis in Northeast China

G.F. Li[1], R.P. Gao[1]*, X.J. Zhang[1], J. Zhu[1]. [1]*First Norman Bethune Hospital, Jilin University, China*

Background and Aim: The prevalence of brucellosis has been increasing in China in the past decade. Misdiagnosis and delay in treatment often occurs owing to atypical symptoms and more complications. The aims of this study were to analyze the clinical features and current treatment options of brucellosis in Jilin Province in Northeastern China.
Methods: Brucellosis was diagnosed in 118 patients during the periods from January 1998 through September 2009 in our hospital. The main epidemiologic and clinical data for those patients were collected and analyzed.
Results: Of the 118 patients, 97 males and 21 female, the mean age at the time of diagnosis was 26 years (range 12–73). They were farmers (72.8%), veterinary (6.7%) and herdsmen (5.9%). 3 of those patients was sika deer breeders. Sources of infection for those patients were sheep (62.7%), followed by cow (17.7%), dog (3.3%), and deer (2.5%). Transmission of brucellosis to human occurred mostly through deliver aminal baby. Clinical symptoms were usually atypical and complications were common. All of the patients with fever, which has high fever (72%), refund sweat (72%), headache (22%), muscle pain (22%), liver enlargement (45.7%), splenomegaly (47.4%), and lymph node enlargement (24.5%). Complications, in order of frequency, were hepatitis (64.4%), arthritis (55.9%), epididymal orchitis (8.5%), pneumonia (6%), meningitis (1.7%) and nephritis (0.8%). Combination therapies with brucellosis for first 5–7days were Doxycycline plus Levofloxacin (50%), Doxycycline plus Strepmycin (12.7%), Doxycycline plus Ceftazidime (16.9%), and others (15.3%). The highest frequency of subsequent treatment was Doxycycline plus Rifampacin (79.6%). 4 of those patients failed after an initial treatment of Doxycycline for 7 days, and eventually cured by using the combination of Doxycycline plus Rifampacin for 6 weeks.
Conclusion: Brucellosis is mainly found in rural areas of Jilin province of China and early diagnosis and standardized treatment for brucellosis should be further strengthened.